

Al – Te (Aluminum – Tellurium)

Phase diagram

A review of this system is given by Prabhu et al. [90 Pra] (see Fig. 1).

The thermal arrest at 735 ± 5 K can not be found at the Al-rich side of Al_2Te_3 . Therefore a phase transformation of Al_2Te_3 does not exist.

Thermodynamics

In Fig. 2 enthalpies of mixing are plotted as a function of concentration [90 Pra]. Giustini et al. [96 Giu] have determined thermodynamic activities from torsion vapor pressure measurements at 1250 K (see Fig. 3).

Figures

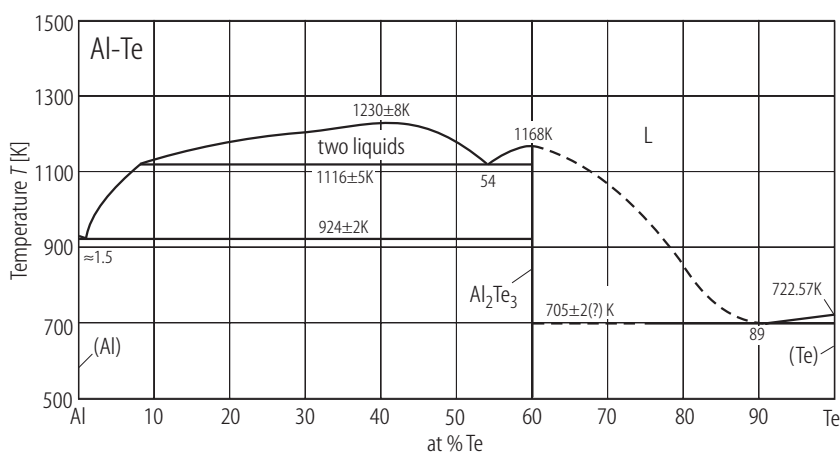


Fig. 1. Al-Te. Phase diagram [90 Pra].

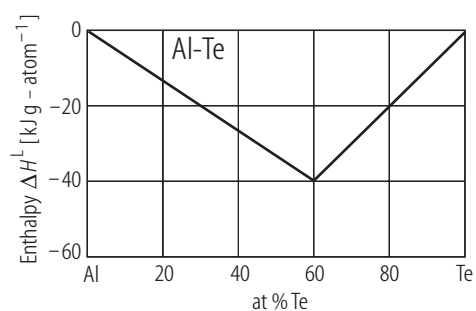


Fig. 2. Al-Te. Integral enthalpy of mixing of liquid alloys at 1190 K, taken from [90 Pra].

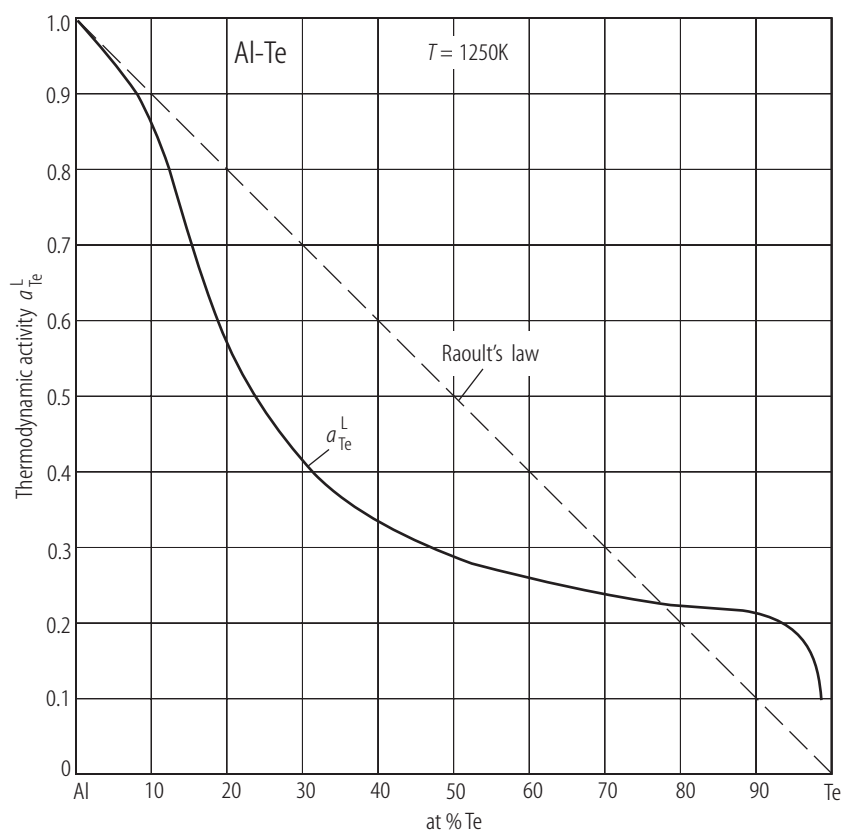


Fig. 3. Al-Te. Thermodynamic activities of Te in liquid at 1250 K [96 Giu].

References

- [90 Pra] Prabhu, N., Howe, J.M.: Bull. Alloy Phase Diagrams **11** (1990) 202
[96 Giu] Giustini, A., Piacente, V., Scardala, P.: J. Alloys and Comp. **245** (1996) 70